

ABSTRACT OF THE DISCLOSURE

A malfunction detection circuit that detects a cell malfunction alternately outputs the results of an overcharge detection executed during an overcharge detection period and
5 the results of an over-discharge detection executed during an over-discharge detection period through time sharing based upon a clock signal. When the cell is in the normal range, the signal level of the signal output during the overcharge detection period is different from the signal level of the
10 signal output during the over-discharge detection period. Thus, in the malfunction detection, the signal generated when an overcharge malfunction has occurred in the cell can be distinguished from the signal generated when an over-discharge malfunction has occurred in the cell.